

**DESIGN SET 1B CAPPING REMEDIAL ACTION  
IMPLEMENTATION REPORT  
INSERT INSTRUCTIONS**

<b><u>Insert Pages</u></b>	<b><u>Insert Location</u></b>
Unsigned Cover Page	Insert in slip on front of binder
Signed Cover Page	Insert inside binder - in front
Table of Contents	Replace existing pages with new pages enclosed
As-Built Drawings	Replace existing figures in Section 2 with insert figures, Fig.2-1, 2-2, 2-3, & 2-4
Certification of Completion Letter to Neil Thompson - USEPA	Replace existing draft letter with final signed letter - Appendix A
Appendix H	Add new Appendix H after Appendix G

# **Design Set 1B Capping Remedial Action Implementation Report**

## **Harbor Island Superfund Site Soil and Groundwater Operable Unit**

**Prepared by:**

**Remediation Technologies, Inc.  
1011 S.W. Klickitat Way, Suite #207  
Seattle, Washington 98134-1162**

**RETEC Project No.: 1-2900-980**

**Prepared for:**

**Design Set #1B Participants and  
The Harbor Island Superfund Site Soil and Groundwater  
Operable Unit Steering Committee  
Seattle, Washington**

**September 15, 1998**

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Seattle, Washington**

**Prepared by:**

  
**Grant Hainsworth, P.E., Environmental Engineer**

**Technical Review by:**

  
**Bryan W. Stone, P.E., Project Manager**

**September 15, 1998**

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EPA-approved Final Remedial Design submitted for Design Set 1B. A certification letter is included in Appendix A.

## **1.3 Report Organization**

- Section 1:** Presents an introduction to the report, how it is organized, and a summary of remedial action cleanup requirements.
- Section 2:** Presents a brief summary of the capping work at each property and describes compliance with performance criteria.
- Section 3:** Provides more detail on the remedial capping work that was completed at each 1B property.
- Section 4:** Provides information regarding future cap inspection and maintenance.
- Section 5:** References.
  
- Appendix A:** Certificate of Completion
- Appendix B:** EPA correspondence regarding ACP cap requirements
- Appendix C:** Photographic log of remedial action capping activities
- Appendix D:** Daily reports of RETEC oversight personnel
- Appendix E:** Physical testing results for material testing, compaction, and permeability
- Appendix F:** Analytical data reports for stockpile soil characterization
- Appendix G:** Documentation of soil disposal
- Appendix H:** Project Cost Summary



## **Appendix H**

### **Project Summary Costs**



## APPENDIX H

### PROJECT SUMMARY COSTS CAPPING REMEDIAL DESIGN AND REMEDIAL ACTION

#### DESIGN SET 1B HARBOR ISLAND S&GOU SUPERFUND SITE

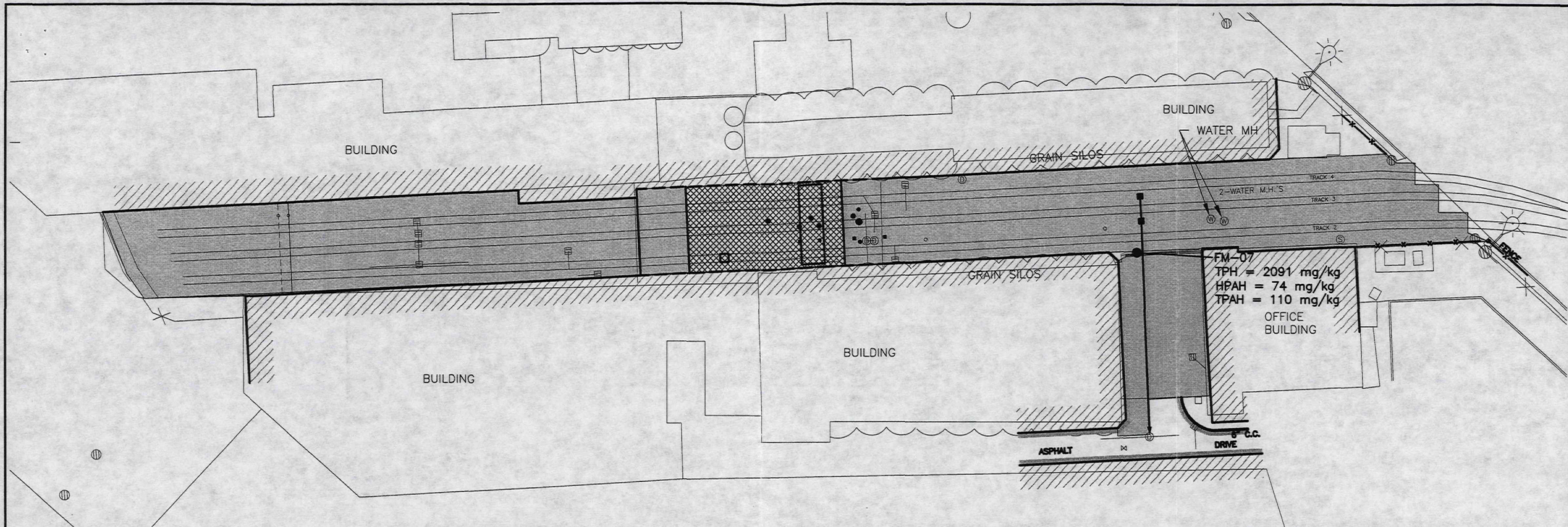
DESIGN SET 1B PROPERTIES	REMEDIAL DESIGN		REMEDIAL ACTION			Total
	Engineering Work Plans	Coordinating Contractor	Cap Construction	Completion Reporting	Coordinating Contractor	
Aspen Paints	\$10,250	—	\$11,780	\$3,750	—	\$25,780
Fisher Mills	\$10,250	—	\$161,000 ^	\$3,750	—	\$175,000
Harbor Island Machine Works	\$10,250	—	\$7,303	\$3,750	—	\$21,303
Union Pacific Railroad (Parcel A)	\$10,250	—	\$7,081	\$3,750	—	\$21,081
	\$41,000	\$6,933	\$187,164	\$15,000	\$3,494	\$243,164

^ - Includes paving, drainage-system improvements, soil handling, and limited soil disposal.



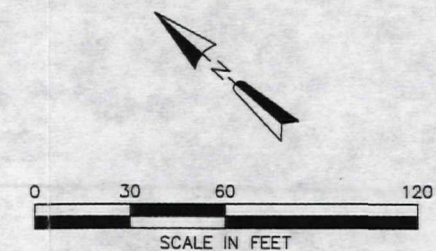






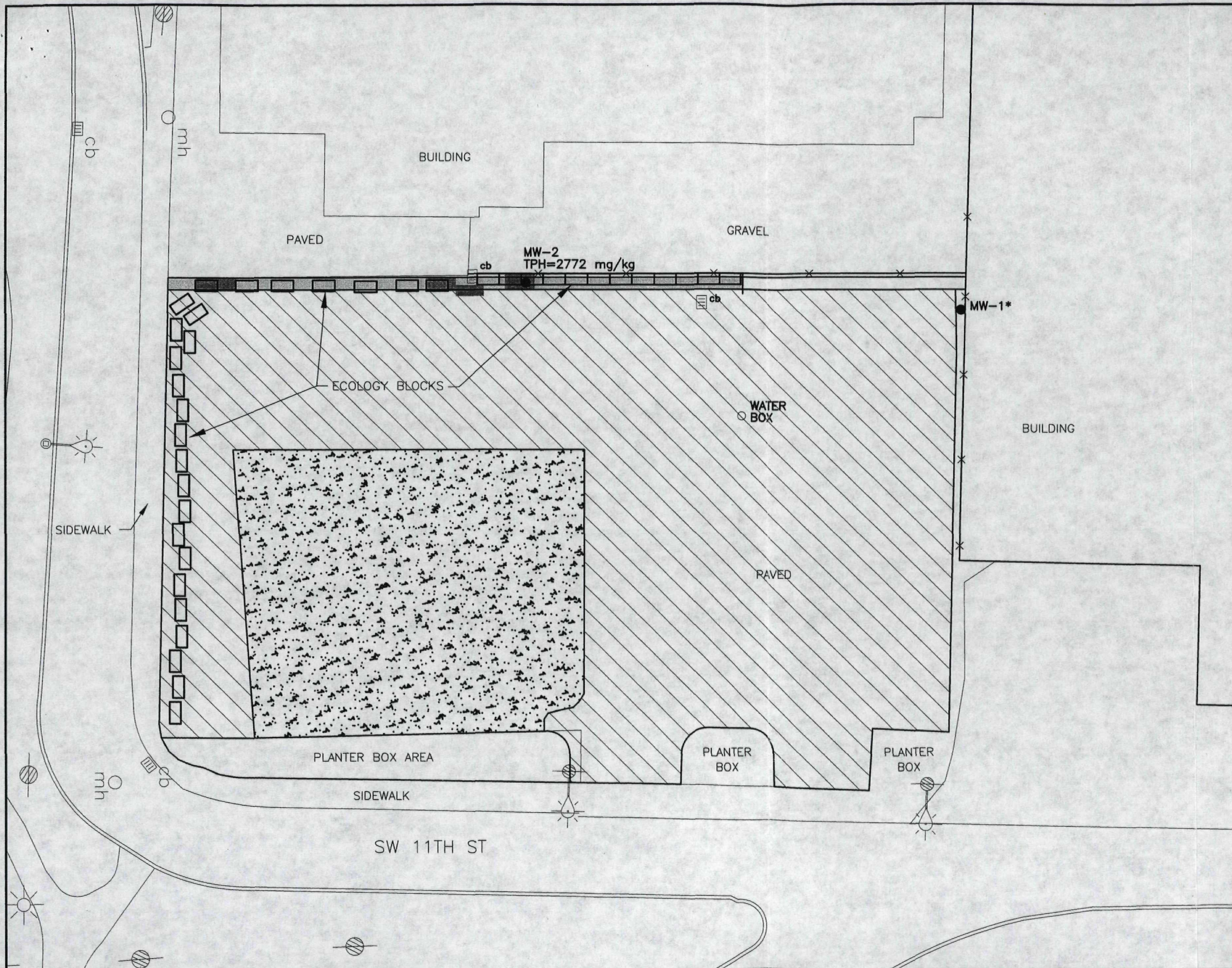
**LEGEND**

EXISTING			
	EDGE OF EXISTING ASPHALTIC CONCRETE		LIGHT POLE
	CATCH BASIN		CATCH BASIN
	C.C.		MANHOLE
	FENCE LINE		NEW CL. B ASPHALTIC CONCRETE (THICKNESS VARIES FROM 3 TO 5-INCHES)
	I.E.		NEW 6-INCH THICK PORTLAND CEMENT CONCRETE
	I.P.		APPROXIMATE SAMPLE LOCATION
	RAILROAD TRACKS		
	SS		
	SD		
	SD		
	WV		
	WM		
	BUILDING FOUNDATION LINE NOTE: BUILDING FACE JOGS IN SEVERAL AREAS ALONG THIS LINE		



SOURCE: DAVID EVANS AND ASSOCIATES, TACOMA, WA. 1997. TRACK AND DRAINAGE IMPROVEMENT PLANS.

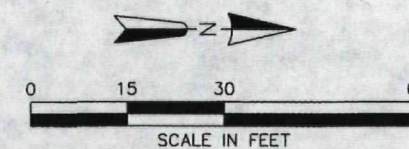




**LEGEND**

- SOIL STRIP PROPOSED TO BE CAPPED WITH 3-INCH ASPHALTIC CONCRETE
- SUITABLE EXISTING PAVEMENT
- EXISTING COMPACTED GRAVEL
- ACTUAL PATCH REPAIRS OF 3-INCH ASPHALTIC CONCRETE PAVEMENT
- EXISTING FENCE
- EXISTING LIGHTPOLE
- EXISTING UTILITY POLE
- CATCH BASIN
- MANHOLE
- APPROXIMATE SAMPLE LOCATION

\* CONSTITUENT CONCENTRATIONS IN SAMPLE WERE BELOW EPA CAPPING CRITERIA.



REFERENCE DWG	DESCRIPTION	NO	DRWN	DATE	REVISION	CHKD	DATE	APPVD	DATE
1		0	H.S.	7/22/98	DRAFT				
2		1							
3		2							
4		3							
5		4							
6		5							



HARBOR ISLAND S&GOU  
SUPERFUND SITE, SEATTLE, WA  
1-2900-980

CURRENT DATE: 7/23/98

CAD FILE: 2499S21S

CAPPING AREA AS-BUILT  
HARBOR ISLAND MACHINE WORKS

**RE/TEC**  
REMEDIAL  
TECHNOLOGIES INC.  
DRAWING NO. 2-3  
REV. 0



